

花火
HANABI

HD/SD 1M/E Digital Video Switcher

HVS-1000HS "1M/E HANABI"



The new, amazing 1ME Hanabi switcher!

Multi-bit rate/multi-format



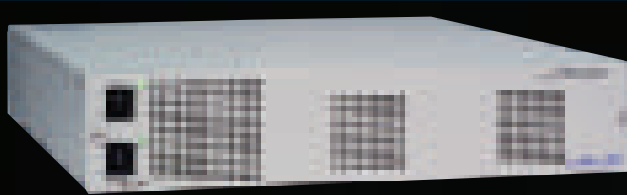
HVS-1000HS is operative in HD and SD format by simply formatting the Operation Unit’s mode setup. HVS-1000HS is also operative in various HD formats such as 1080/60i and 720/60p. Moreover, 4:3 display in HD, in addition to letter-box and squeeze display formats in SD mode are available.

Operative formats in HD: 1080/60i, 59.94i, 50i, 24p, 24sF, 23.98sF, 23.98p, 720/60p, 59.94p.

Operative formats in SD: 525/60 (NTSC), 625/50 (PAL).

*Other formats will soon become available.

2-RU compact size



The Main Unit is only EIA 2-rack-unit in height! Within such a compact dimensions, up to 2 optional DVE (Digital Video Effect) boards, up to 2 optional keyer boards (each optional keyer board includes the chroma key function), and optional redundant power supply can be installed. Meanwhile, the Operation Unit is EIA 3-rack-unit height, so that only 5RU are required for entire system installation. This is convenient for mobile use. (HVS-1000LOU is EIA 3RU and HVS-1000EOU is EIA 4RU.)



2 kinds of Operation Units

There are two different Operation Units available: HVS-1000LOU is particularly designed for live applications, whereas HVS-1000EOU has been specially designed for editing applications. In each Operation Unit, all necessary functions for all applications are included in an extremely user-friendly and practical operating unit.



Operation unit for editing applications

HVS-1000EOU

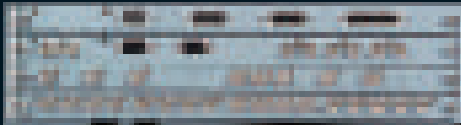


Operation unit for live applications

HVS-1000LOU

Inputs & Outputs

Eight inputs are available as standard, whereas up to 16 inputs, plus 1 utility input, can be configured. Four still store inputs are additionally selectable. Two PGM, 1 PVW, 1 AUX and direct input PVW (without DVE and key) outputs are available as standard. Three additional AUX outputs can be configured as an option.



Main unit rear panel (Full option)

Smallest size DVE

Within the most compact DVE in the world, HD and SD formats are switchable, and up to 2 DVE boards can be installed inside the Main Unit. One-channel DVE operation per board in HD, and 2 channel DVE operation per board in SD format, are available. 2.5D DVE (zoom, rotation, perspective and sub-effects) and 3D DVE (2.5D DVE plus all sophisticated warp - including real 3D - effects) are also available. It is possible to upgrade effects from 2.5D to 3D. DVE can be assigned to background video, keyer 1 and keyer 2.

Forced Background

The Forced Background function allows mixing or wiping inside the digital effects picture, for more versatility in 1ME operation.

Line DVE

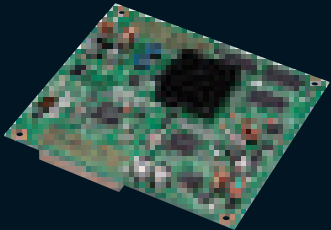
DVE can be added to the PGM, PST, KEY1 and KEY2 buses, and such DVE pictures can be mixed or wiped, allowing simpler arrangement of more effective transitioning effects, such as picture-in-picture.

Motion Blur

The Motion Blur function can provide blur trail effects for motion pictures. Blur effects can be varied by the fader control.

Keyers

Keyer 3 is available, standard, as a downstream keyer. Optional Keyer 1 and Keyer 2 boards can be added. Keyer 1 and Keyer 2 boards include the chroma key function. With Keyers 1, 2 and 3, a maximum of 6 layers are possible.



Still Store

The Still Store function allows storage of up to 4 stills via compact flash memory card, for easy downloading and use of PC-stored images, within the system.



Animation Logo

Using the Still Store function, up to 4 animation logo displays are possible.

Safety Area Marker & Color bars

A Safety Area Mark generator, available as standard, is useful for checking which part of pictures are on-air, when pictures are downloaded from HD to SD. the Color bars is also available as standard.

Networking

If the optional Arcnet board is installed, up to 5 Hanabi series products can be connected on the Arcnet. Also if the Ethernet option is installed, PC images can be transferred directly to the system via Ethernet

Easy maintenance

Upgrading functions and installing new software can be done through the compact flash memory card, while software required for upgrading and service maintenance can be downloaded to the flash memory through Ethernet. Thus fast and easy service is supported.

Result From Our Hearings For Editing & Live Production.

For Editing Applications



Configuration

- *HVS-1000HS 1ME Hanabi Main Unit: 8 inputs, 2 PGM outputs, 1 PVW output, 1 AUX output, 1ch keyer (DSK)
- *HVS-1000EOU Operation Unit: designed for editing applications
- *DVE-1000HS 2.5D DVE: 1 channel for HD and 2 channels for SD
- *HVS-ED100 Editing Control Software: supports GVG-100 and BVS-3000 protocol.

Large color LCD display



A 6.4" color LCD is used for easy operation. Format mode setup, wipe and DVE patterns, and other setup parameters, are visibly selected.

Setup Condition



Wipe, Keyers, and DVE setup condition are indicated by the LED indicator, for easy recognition of the operation mode for the operator.

Line DVE buttons



A Line DVE button is independently available on each bus, so that besides the DVE transition, DVEs can be assigned to each bus.

User Preset buttons



Eight user Preset buttons are available on the EOU, for quick selection and retrieval of operator settings, definitely useful for editing application.

Event Memory

200 event memory is available.

Sequence Memory

Sequence displays using up to 20 event patterns are available. Sequences can be linked with the fader, to enable fader operation.

For Live Applications



Configuration

- *HVS-1000HS 1ME Hanabi Main Unit: 8 inputs, 2 PGM outputs, 1 PVW output, 1AUX output, 1 input direct output, 1ch keyer (DSK)
- *HVS-1000LOU Operation Unit: designed for live applications
- *DVE-1000HS 2.5D DVE: 1 channel for HD and 2 channels for SD

DVE Pattern selectors



Five DVE Pattern Selection buttons are available for instant selection of required DVEs.

Key selectors



Three independent key selection buttons are available for Keyer 1, Keyer 2 and Keyer 3, efficiently improving live operation.

Input Direct Preview



The Input Direct Preview button can allow the operator to see and check all input signals which are not linked through the ME bus.

Utility Input



The optional Utility Input is used for camera returns to a studio camera, or floor monitoring, in the studio, and can only be selected on the AUX bus.

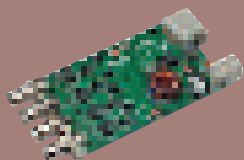
A large TFT display

TFTs are the best display format for live use.

Options

HVS-1000HSDI

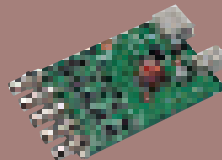
Digital 4-input expansion card



This unit allows HD/SD-SDI to be expanded four inputs at a time. A maximum of two cards can be added, for expansion to a total of sixteen inputs.

HVS-1000HSCR

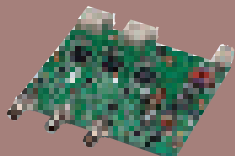
Expansion card with four digital inputs and a utility input



This unit adds four HD/SD-SDI inputs and one utility input. One expansion card of this type can be added.

HVS-1000HSDO

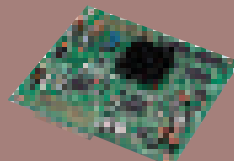
Digital 3-output expansion card



This unit adds three AUX outputs. One card can be added.

HVS-KEYER

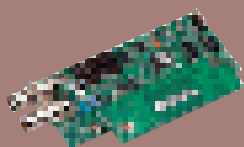
Keyer expansion card



This unit is used to add keyers. A maximum of two cards can be added (edge, shadow, Chroma key).

HVS-ARCNET

ARCNET connection card



This interface unit is used to connect HANABI peripheral devices such as HVS-AUX16. One card of this type can be added.

HVS-ED100

Editing control software

This software program is used to support the GVG-100 and BVS-3000 editing protocols (It is provided as a standard feature with the editing package).

DVE-1000HS

HD/SD switchable DVE unit (2.5D DVE)

This unit enables DVE effects (two channels for SD; one channel for HD). A maximum of two units can be installed (one unit is provided as a standard feature with each package).

DVE-1000HSA

HD/SD switchable DVE unit (3D DVE)

This unit is an upgrade from the HVS-1000HS. It provides a wide range of additional features, including a DVE-wipe effect.

HVS-1000PSM

Redundant power supply for main unit



This unit makes the main unit power supply redundant.

HVS-1000PSO

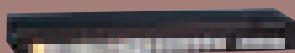
Redundant power unit for OU



This unit makes the OU power supply redundant.

HVS-AUX16

AUX control panel



A maximum of four AUX switch units can be connected (HVS-ARCNET is required for connection.)

HVS-AUXRK

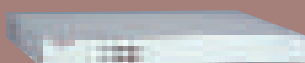
AUX panel extension kit



This kit provides an extension for connecting the separated HVS-AUX16 panel to the main unit. The maximum extension distance is five meters.

HVS-TALR

Tally relay unit



This unit is a contact output-type tally relay unit. It contains 64 independent output circuits. A single tally relay unit can provide 32 separate R-TALLY/G-TALLY outputs.

HVS-TALOC

Tally open collector unit



This unit is an open collector-type tally unit. It contains 64 independent output circuits. A tally open collector unit can provide 32 separate R-TALLY/G-TALLY outputs.

Specifications

	HD mode	SD mode
Standard	1080/60i, 59.94i, 50i, 24p, 24sF, 23.98sF, 23.98p, 720/60p, 59.94p, 1035/60i, 59.94i (Selectable at menu) (Other formats will be released)	525/60 (NTSC), 625/50 (PAL) (selectable at menu)
Signal processing	4:2:2:4 digital component, 10-bit	
Sampling frequency	Y: 74.25MHz, 74.25/1.001MHz C: 37.125MHz, 37.125/1.001MHz Key: 74.25 MHz, 74.25/1.001MHz	Y: 13.5MHz C: 6.75MHz Key: 13.5MHz
Video Input	8 standard inputs, optionally expandable to 16 inputs plus 1 Utility input	
	HD SDI: 1.485Gbps or 1.485/1.001Gbps, 75Ω, BNC	Digital component: 270Mbps, 75Ω, BNC
Reference Input	Tri-level Sync: ±0.3Vp-p or BB: 0.429Vp-p (NTSC) / 0.45Vp-p (PAL) 75Ω or loopthrough, 1ea., BNC	BB: 0.429Vp-p (NTSC) / 0.45Vp-p (PAL), 75Ω or loopthrough, 1ea., BNC
Video Output	5 standard outputs, optionally expandable to 8 outputs	
	HD SDI: 1.485Gbps or 1.485/1.001Gbps, 75Ω, BNC	Digital component: 270Mbps, 75Ω, BNC
Reference Output	Tri-level Sync: ±0.3Vp-p or BB: 0.429Vp-p (NTSC) / 0.45Vp-p (PAL) 75Ω, 1ea., BNC	BB: 0.429Vp-p (NTSC) / 0.45Vp-p (PAL), 75Ω, 1ea., BNC
I/O Delay	1H (when DVE option not applied to output), 1 frame +1H (KEY1, KEY2), 1 more additional frame when DVE applied to output	
Memory Device	Memory card (compact flash card)	
Interfaces	OU: 1ea., 15-pin D-sub (female)	
	RS-422: 1ea., 9-pin D-sub (female) (for router, tally unit, etc)	
	GPI IN: 1ea., 15-pin D-sub (female)	
	GPI/TALLY OUT: 1ea., 25-pin D-sub (female)	
	EDITOR: 1ea., 9-pin D-sub (female)	
	ALARM: 1ea., 9-pin D-sub (female)	
	ARC-NET: 75Ω, 1ea., BNC (optional for HANABI series)	
	NETWORK: 10/100BASE-T 1ea., RJ-45 (optional)	
Battery Duration	About 3 years	
Temperature / Humidity	0°C - 40°C / 30% - 90% (no condensation)	
Power	100VAC - 240VAC 50/60Hz	
Consumption		
	Standard	Approx. 165VA (at 100VAC), Approx. 170VAC (at 240VAC)
	Full option	Approx. 265VA (at 100VAC), Approx. 270VAC (at 240VAC)
Dimensions / Weight	MU: 430 (W) x 88 (H) x 503 (D) mm EIA 2RU / Approx. 15kg	
	EOU: 430 (W) x 162.6 (H) x 310 (D) mm / Approx. 6.5kg	
	LOU: 430 (W) x 131.7 (H) x 310 (D) mm / Approx. 6.5kg	
Accessories	MU: User's Manual / AC Cable / Rack mount brackets	
	OU: AC Cable / Connection cable / PC Card	
Options*4	HVS-1000HSDI: Digital 4-input expansion card	
	HVS-1000HSCR: Expansion card with four digital inputs and a utility input	
	HVS-1000HSDO: Digital 3-output expansion card	
	HVS-ARCNET*1: ARCNET connection card	
	HVS-KEYER: Keyer expansion card	
	HVS-ED100: Editing control software	
	DVE-1000HS*2: HD/SD switchable DVE unit (2.5D type)	
	DVE-1000HSA*2: HD/SD switchable DVE unit (3D DVE type)	
	HVS-1000PSM: Redundant power supply for main unit	
	HVS-1000PSO: Redundant power unit for OU	
	HVS-AUX16: AUX control panel	
	HVS-AUXRK: AUX panel extension kit	
	HVS-TALR*3: Tally relay unit	
	HVS-TALOC*3: Tally open collector unit	

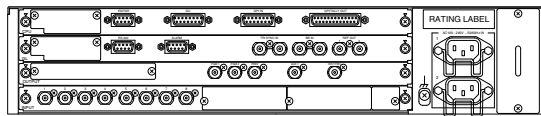
*1: HVS-ARCNET is acquired when use HVS-AUX16.

*2: Either of DVE-1000HS and DVE-1000HSA can be installed.

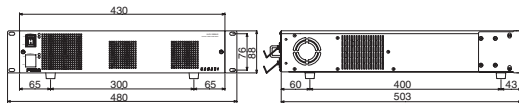
*3: Up to 5 units of HVS-TALR and HVS-TALOC are connectable.

*4: See the right page for more information about Options.

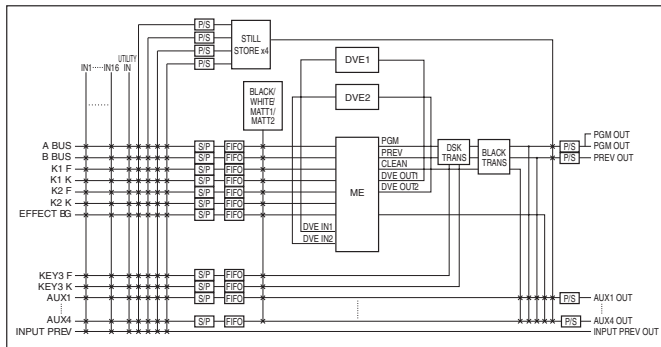
HVS-1000HS Rear Panel



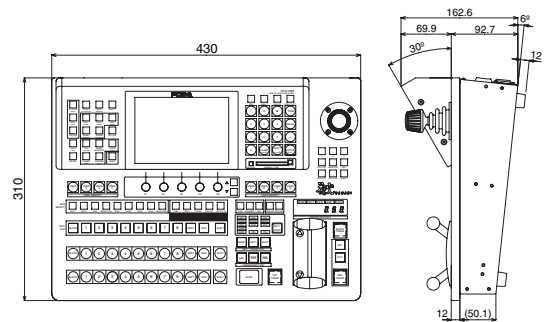
HVS-1000HS External Dimensions



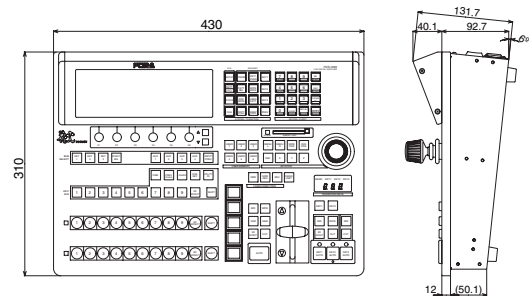
Block Diagram



HVS-1000EQU External Dimensions



HVS-1000LOU External Dimensions



Versatile Hanabi Switcher small in stature, giant in performance

Hanabi SD and HD Digital Video Switchers offer high performance and great functionality in the world's most compact, 2M/E, 3-RU main frame system.

HVS-3000H/S "2M/E HANABI"

- Select either SD or HD models; HVS-3000S/H
- Available for SDI, HD 1080i/50, HD 1080i/60, HD 720p and HD 24p
- 8, 16, 24 and 32-button Operation Panel specially designed for live use
- 3U compact size Main Unit including 4ch (SD) / 2ch (HD) free assignable DVEs
- 4 Still Stores, 3 independent keyers per M/E, 2 Chroma Keyers
- 10 AUX outputs, multi unit control via Arnet and more...



HANABI

FOR-A COMPANY LIMITED

Head Office : 3-8-1 Ebisu, Shibuya-ku, Tokyo 150-0013, Japan

FOR-A UK Limited : UNIT C71, Barwell Business Park, Leatherhead Road, Chessington Surrey, KT9 2NY, U.K.

FOR-A Italia S.r.l. : Viale Europa 50 20093, Cologno Monzese (MI), Milan, ITALY

FOR-A America Corporate Office : 11125 Knott Ave., Suite #A, Cypress, CA 90630, U.S.A.

FOR-A America East Coast Office : 1065 Avenue of the Americas Suite #1701A New York, NY 10018, U.S.A.

FOR-A America Atlanta Office : 4219 Burns Heritage Trail, Roswell, GA, 30075, U.S.A.

FOR-A America Distribution & Service Center : 2400 N.E. Waldo Road, Gainesville, FL 32609, U.S.A.

FOR-A Corporation of Canada : 425 Queen St. W. #210, Toronto, Ontario M5V 2A5, CANADA

Homepage: <http://www.for-a.com>

+81 (0)3-3446-3936

+44 (0)20-8391-7979

+39 02-254-3635/6

+1 714-894-3311

+1 212-861-2758

+1 770-645-7776

+1 352-371-1505

+1 416-977-0343

Fax : +81 (0)3-3446-1470

Fax : +44 (0)20-8391-7978

Fax : +39 02-254-0477

Fax : +1 714-894-5399

Fax : +1 212-861-2793

Fax : +1 770-234-5165

Fax : +1 352-378-5320

Fax : +1 416-977-0657

